

Directive

9180.47

06/15/99

EXAMINATION OF GRAIN FOR THE PRESENCE OF TCK SMUT SPORES

1. **PURPOSE**

This directive transmits sample handling and certification procedures for grain examined for the presence of *Tilletia controversa* Kuhn (TCK) smut spores.

2. **REPLACEMENT HIGHLIGHTS**

This directive replaces Program Directive 918.47, Examination of Grain for the Presence of TCK Smut Spores, dated March 4, 1997. It updates methodology and location of testing provider.

3. **POLICY**

The Administrator has determined that the Federal Grain Inspection Service (FGIS) will, upon request, provide for analysis of grain samples for the presence of TCK smut spores under the guidelines of the U.S. Grain Standards Act.

4. **BACKGROUND**

TCK, also called Dwarf Bunt, is a smut fungus found in the soil or on the surface of wheat kernels. The organism only infects plants that grow during the winter. High levels of the disease are usually found after early and persistent snow cover. Wheat infected with TCK is obviously dwarfed in contrast to healthy plants and the inside of each kernel is converted into millions of fungus spores. The spores are not harmful to humans or livestock. Using current detection methodology, it is possible to adequately measure the presence of spores. Upon request, analysis of grain samples other than wheat for presence of TCK smut spores is permissible.

5. **REQUEST FOR SERVICES**

Due to an agreement reached with Chinese (PRC) officials, FGIS has arranged for TCK smut testing service (quantitative or qualitative) to be provided through the Wheat,

Marketing Center (WMC) laboratory in Portland, Oregon. FGIS= Analytical, Reference, and Testing Services Branch (ARTS), Technical Services Division (TSD), in Kansas City, Missouri, will provide oversight of the laboratory. The test may be performed on shiplot composite samples, unit train composite samples, bargelots, carlots, trucklots, and submitted samples. Interested parties wishing to receive TCK testing should contact their local field office for service.

6. **RESPONSIBILITIES**

- a. Applicant for Service. The applicant shall request the optional testing service through the local service point. The request must include the applicant's name, address, and telephone number, whether qualitative or quantitative certification is desired, and destination, if known. A quantitative analysis (actual number of spores per 50 grams) is provided unless a qualitative analysis (a screening for the presence of TCK) is requested. The qualitative analysis will cease when the first teliospore is detected.
- b. Local Service Point/Field Office. The local service point shall forward the sample to WMC, at the applicant's expense, with the required information (see below). The Portland Field Office shall report the results to the applicant, issue the certificate, and bill the applicant. Billing shall consist of the current non-contract hourly sampling rate, if applicable, plus the specified per sample analysis rate amount billed by WMC, rounded to the closest quarter hour of rate code G213. All applicant and vessel information sent to the WMC with the sample shall also be sent electronically to the Portland Field Office so they are aware of the volume of samples in the system and can plan the administrative work accordingly.
- c. WMC. The WMC is responsible for performing the original test and appeal analysis, if any, maintaining a file sample for 90 days, reporting the results to the specified field office in a timely manner, and billing that field office. The WMC shall maintain all test records requested by FGIS and provide all supervision samples and documentation to TSD as per a separate, mutually agreed protocol.
- d. TSD. The TSD will provide supervision of the TCK smut services provided by the WMC to ensure compliance with prescribed administrative procedures and laboratory methodology. To help ensure timely service to the applicant in the event of heavy sample submission, the TSD may be required to assist WMC in performing original sample analysis for TCK smut and bill accordingly for all original and appeal services Performed.

TSD shall perform any requested Board appeal service.

7. **GENERAL SAMPLING AND ANALYTICAL PROCEDURES**

The TCK analysis requires a 500-gram minimum sample. Original service points must maintain an additional 500-gram sample as a backup file sample. Upon completion of official sampling and/or inspection, the service point forwards the official sample to WMC. The WMC shall maintain a file sample on each original and appeal inspection for 90 days.

The local service point shall use a Boerner divider to obtain a 500-gram minimum sample from a representative sample (vessel or unit-train composite) and place it in an airtight container (e.g., double walled, sealed plastic bag) for shipment to the lab. The sample bag shall be marked with the carrier identification name or number, type of test requested, and accompanied by documentation identifying the carrier, lot number (if applicable), original inspection certificate number (if available), field office or OA address and phone number, the date, destination (mandatory if going to the PRC), and a legible copy of the application for inspection. Retain a file sample of at least 500 grams in an airtight container.

Send the sample(s) and documentation by overnight delivery (if appropriate), at applicant-s expense, to:

Wheat Marketing Center, Inc.
1200 N.W. Front Avenue, Suite 230
Portland, OR 97209-2800

ATTN: TCK TESTING

NOTE: Sample analysis will take hours and possibly days. The lab will notify the Portland Field Office of the result(s) promptly upon completion of testing. However, in case of an emergency, the WMC may be contacted at (503) 295-0823 or a fax sent to (503) 295-2735.

8. **REVIEW INSPECTIONS**

Sections 800.125 and 800.135 of the regulations permit a review inspection on either official grade/factors or official criteria. When requested, a review inspection for official grade/factors and official criteria may be handled separately even though both sets of results are reported on the same certificate.

Applicants may request either qualitative or quantitative review analysis unless the original or a review analysis was quantitative. Then, only a quantitative analysis is available. All review inspection results replace previous results.

The WMC shall perform a requested appeal inspection basis their file sample. If a Board appeal is requested then WMC shall forward a sufficient representative portion of their file to TSD, who shall perform the Board appeal inspection. No subsequent review inspections are permitted.

9. **CERTIFICATION**

Certificate the results by showing the applicable statement in the **Remarks** section of the appropriate official certificate. All shipments to the PRC shall be analyzed quantitatively.

Quantitative TCK testing:

Export shipments to the PRC:

Tilletia controversa Kuhn spores (exceed/do not exceed) 30,000 per 50 grams of sample

and

All quantitative export and domestic analyses:

(number of spores) **Tilletia controversa** Kuhn spores per 50 grams of sample.

Qualitative TCK testing:

Tilletia controversa Kuhn spores (present/not present).

10. **QUESTIONS**

Any questions should be directed to the ARTS at (816) 891-0497, or to the Standards and Procedures Branch at (202) 720-0252.

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